

**S**YSTEM **P**LANNING & **A**NALYSIS **R**EPORT

**S-16**

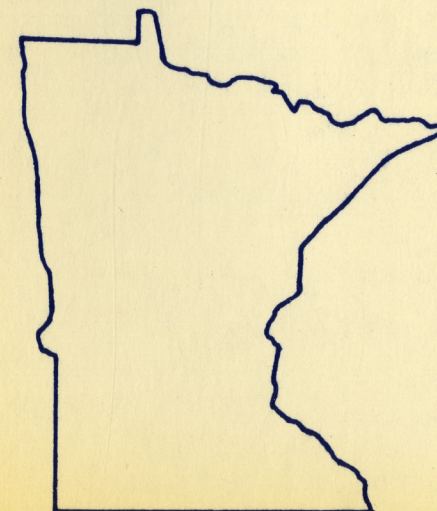
TH 55 & 52

SO. JCT. TH 49 TO  
SO. JCT. TH 56

S. P. 1909, 1907

JULY, 1970

PREPARED BY  
**OFFICE OF SYSTEM PLANNING**



**MINNESOTA  
DEPARTMENT  
OF HIGHWAYS**



DEPARTMENT HIGHWAY

# Office Memorandum

TO : Paul G. Velz  
Road Design Engineer

DATE: July 15, 1970

FROM : Morris Gildemeister, Chief  
Statewide Planning Section

SUBJECT: TH 55 & 52, TH 49 to TH 56  
SP 1909, 1907  
System Planning & Analysis Report S-16

The Statewide Planning Section transmits this report in response to R.T. Peterson's January 22, 1970 request for the 1985 ADT, DHV, and HCADT for the project location shown on the map on page 2.

The estimated 1985 ADT volumes are shown on the map on page 3.

For each segment numbered on the map on page 3, the following data are tabulated on pages 4-7.

- (a) Total ADT
- (b) Vehicle Type Distribution
- (c) Total HCADT

Segment 1, with a 1985 ADT of 24,600 has the highest ADT on the project section of TH 49 & 55. This segment has a 1968 ADT of 10250 vehicles.

The basic data, method, and assumptions used to prepare this report are presented on page 8.

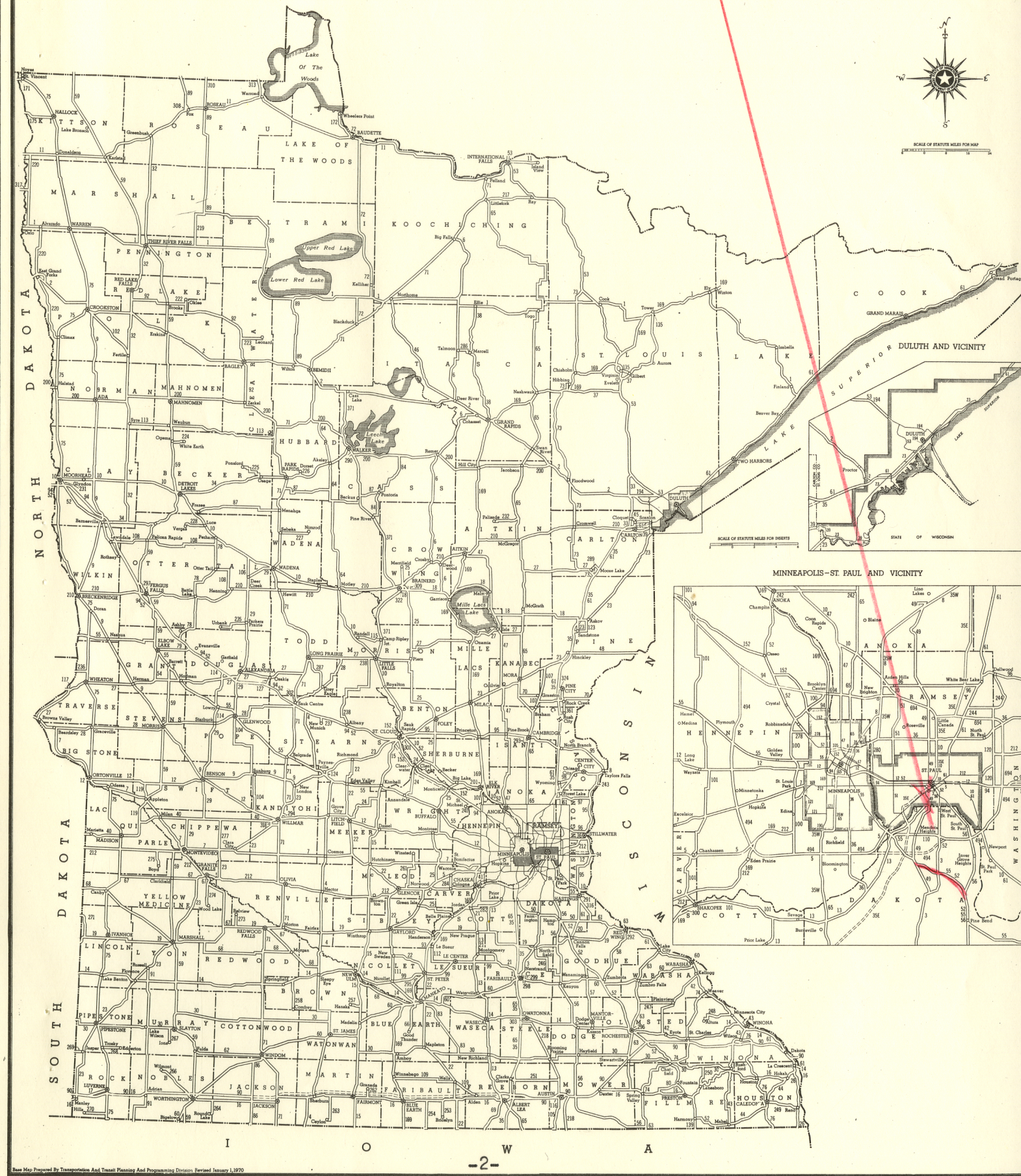
*Morris Gildemeister*

Morris Gildemeister, Chief  
Statewide Planning Section

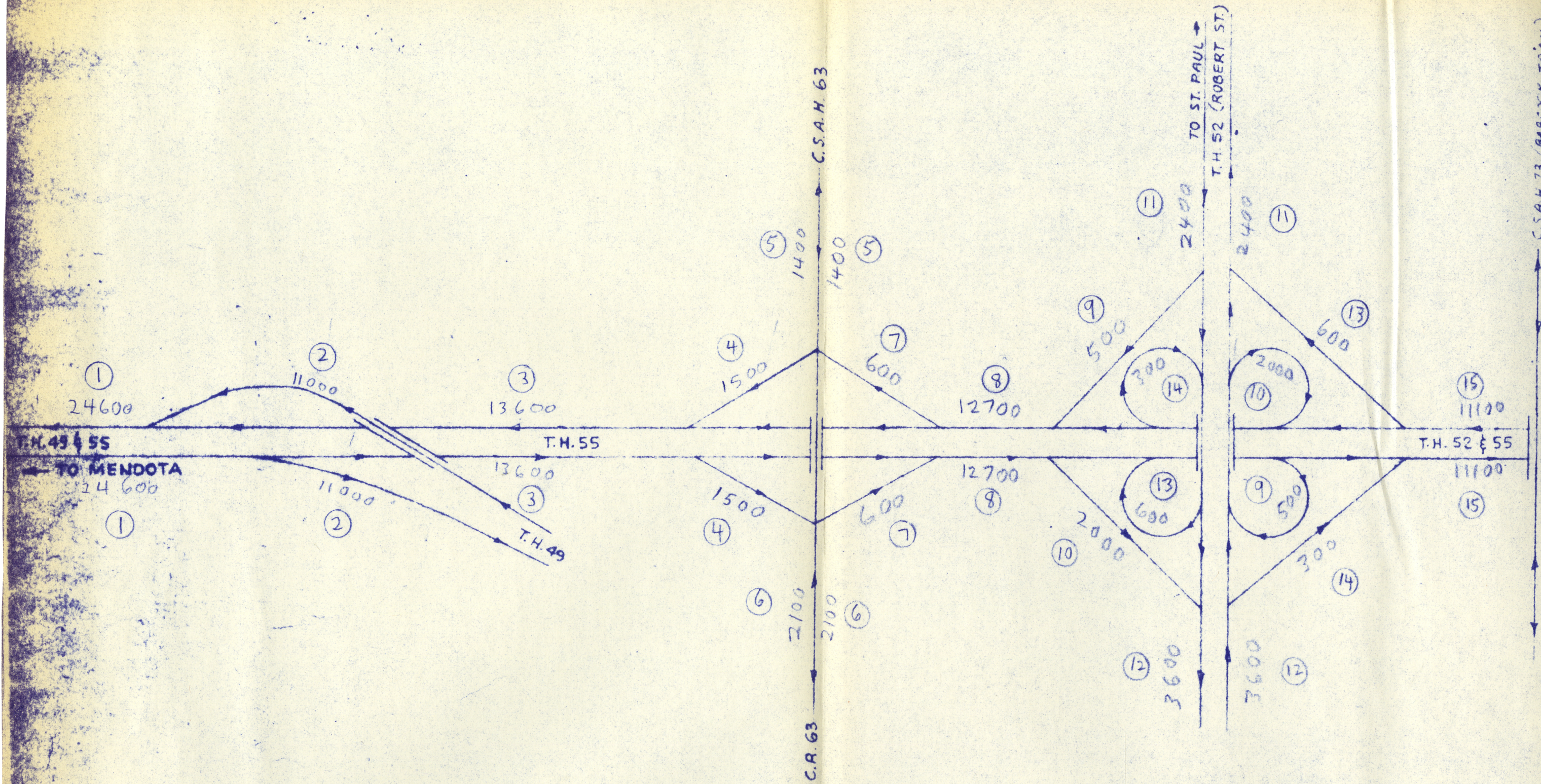
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STATE OF MINNESOTA  
DEPARTMENT OF HIGHWAYS  
WORK MAP

Project Location  
S.P. 1909, 1907

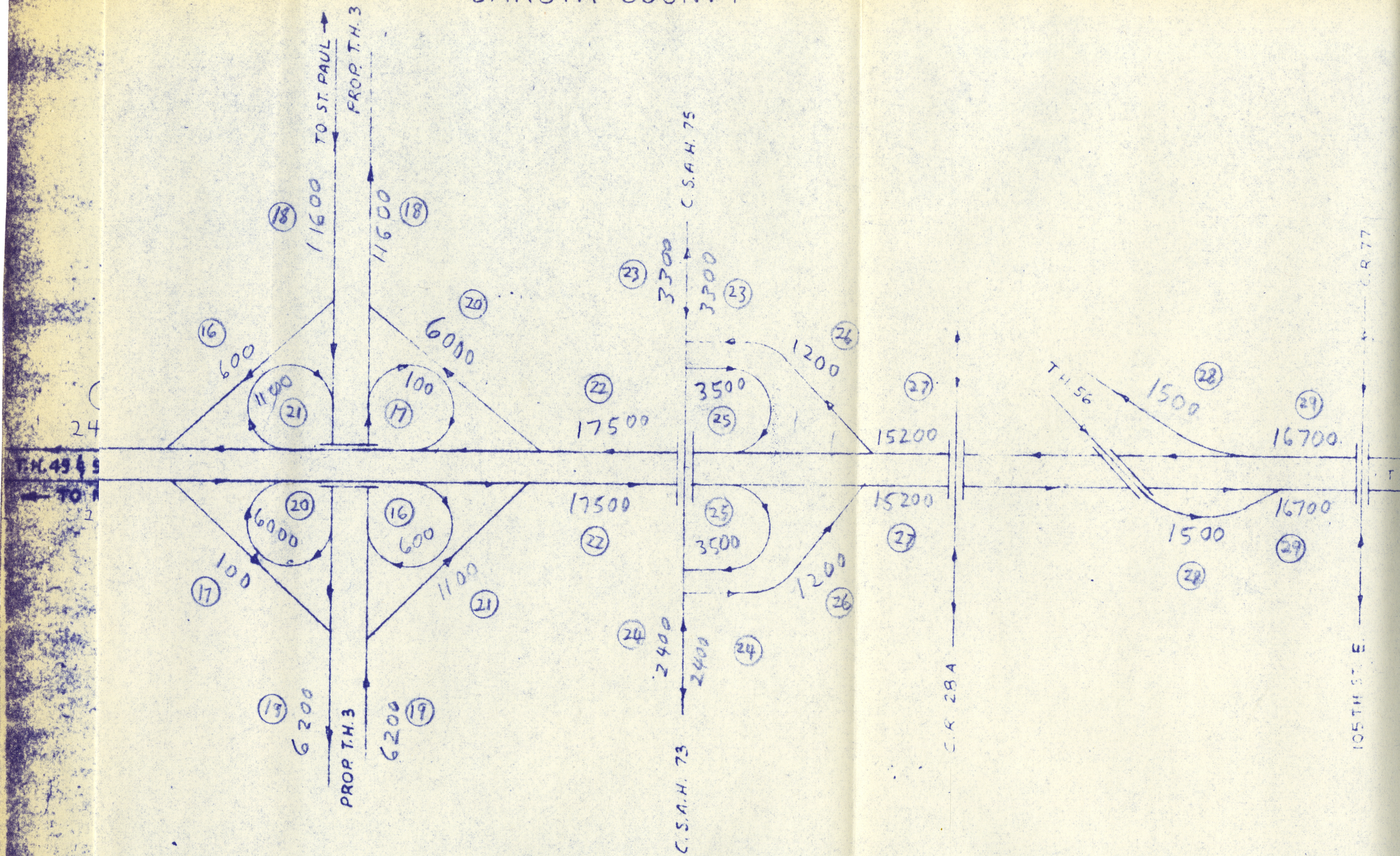








# DAKOTA COUNTY



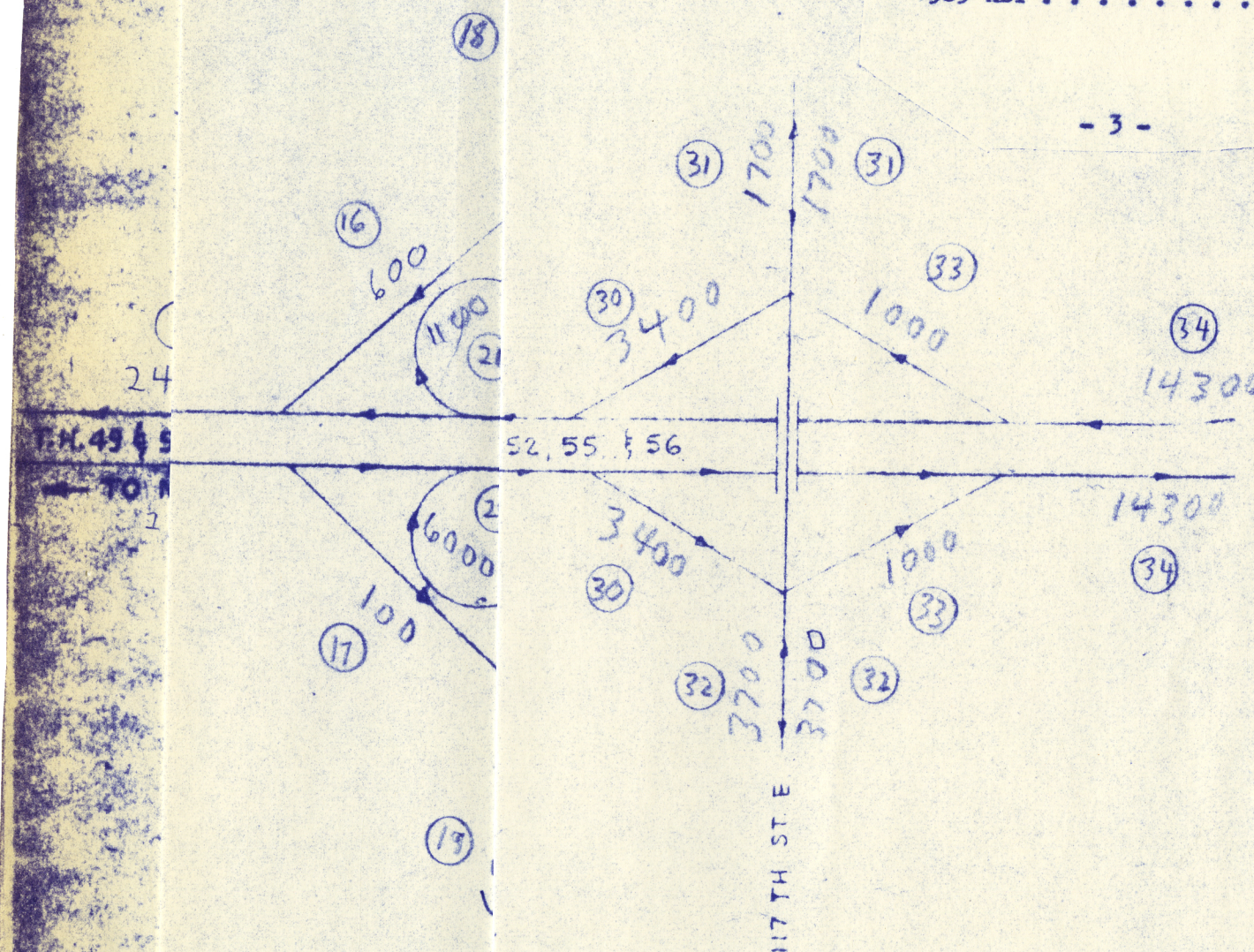


South Junction TH 49  
to South Junction TH 56

Legend

Segment Number. . . . . 34  
1985 ADT . . . . . 14300

- 3 -



12" x 33"

SPAR. 4-15



## TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 1 OF 4

FOR

T.H. 55 & 52 S.P. 1909, 1907 LENGTH - MILESCOUNTY Dakota LOCATION South Junction TH 49 to SouthJunction TH 56

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	22500	10048	12452	14411	1345	2021	576	11587	477	1909	2291
1	894	512	382	42	39	59	17	357	111	45	54
2	245	126	119	8	7	10	3	174	6	23	28
3	160	71	89	2	2	2	1	88	1	2	2
4	205	77	128	2	2	2	1	127	1	6	7
5	459	112	347	2	2	2	1	346	1	4	5
6	137	54	83	3	3	4	1	81	3	11	13
TOTAL ADT	24600	11000	13600	1500	1400	2100	600	12700	500	2000	2400
TOTAL H. COMM. ADT	2100	952	1148	593	55	79	24	1113	23	91	109
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

## \* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS  
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
 2 = SINGLE UNIT-3 AXLE TRUCKS  
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES  
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES  
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES  
 6 = BUSES AND TRUCKS WITH TRAILERS

## TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 2 OF 4

FOR

T.H. 55 & 52 S.P. 1909, 1907 LENGTH - MILESCOUNTY Dakota LOCATION South Junction TH 49 to SouthJunction TH 56.

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	3439	569	285	10055	557	95	10780	5785	5571	1038	16012
1	81	14	7	322	25	2	379	134	248	26	569
2	41	8	4	97	11	1	154	42	114	12	211
3	2	1	-	86	-	-	25	25	2	2	90
4	11	2	1	123	-	1	36	40	2	5	129
5	7	22	1	344	1	1	81	91	2	12	356
6	19	4	2	73	6	-	145	83	61	5	133
TOTAL ADT	3600	600	300	11100	600	100	11600	6200	6000	1100	17500
TOTAL H. COMM. ADT	161	31	15	1045	43	5	820	415	429	62	1488
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

## \* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS  
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
 2 = SINGLE UNIT-3 AXLE TRUCKS  
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES  
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES  
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES  
 6 = BUSES AND TRUCKS WITH TRAILERS



TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 3 OF 4

FOR

T.H. 55 & 52 S.P. 1909, 1907 LENGTH - MILES  
COUNTY Dakota LOCATION South Junction TH 49 to South Junction TH 56

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS  
DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER											
	23	24	25	26	27	28	29	30	31	32	33	
0	3176	2310	3365	1155	13802	1454	15256	3272	1635	3559	962	
1	92	67	98	34	505	16	521	95	48	104	28	
2	16	12	18	6	199	6	205	17	8	18	5	
3	33	2	4	1	87	2	89	3	22	4	1	
4	3	2	4	1	126	4	130	3	22	4	1	
5	3	2	4	1	353	16	369	3	2	4	1	
6	7	5	7	2	128	2	130	7	23	7	2	
TOTAL ADT	3300	2400	3500	1200	15200	1500	16700	3400	11700	13700	1000	
TOTAL H. COMM. ADT	124	90	135	45	1398	46	1444	128	65	141	38	
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

\* VEHICLE TYPE CODE

- 0 = PASSENGER CARS AND 4 TIRE TRUCKS  
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
2 = SINGLE UNIT-3 AXLE TRUCKS  
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES  
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES  
6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 4 OF 4

FOR

T.H. 55 & 52 S.P. 1909, 1907 LENGTH - MILES  
COUNTY Dakota LOCATION South Junction TH 49 to South Junction TH 56

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH - AS  
DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER											
	34											
0	12946											
1	454											
2	193											
3	87											
4	128											
5	367											
6	125											
TOTAL ADT	14300											
TOTAL H. COMM. ADT	1354											
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

\* VEHICLE TYPE CODE

- 0 = PASSENGER CARS AND 4 TIRE TRUCKS  
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
2 = SINGLE UNIT-3 AXLE TRUCKS  
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES  
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES  
6 = BUSES AND TRUCKS WITH TRAILERS



#### Basic Data, Method and Assumptions

The 1985 ADT and DHV is transmitted in SPAR M-15 on May 4, 1970.

The heavy commercial ADT total is based on System 14 Heavy Truck ADT Study.

Heavy Commercial ADT was distributed by vehicle type based on vehicle classification counts taken on roads with similar travel patterns.

Vehicle classification counts were taken on segments 3, 15, 28. These counts augmented the basic data for this project. Projected traffic volumes for 1995 may be obtained by expanding the enclosed volumes by approximately 30 percent.